# TECHNOLOGY SERVICES PROGRAM ELEMENT:

Desktop Computer Modernization (DCM)

## PROGRAM MISSION:

PROGRAM:

To provide up-to-date desktop PCs and software and improved levels of service (acquisition, management, Help Desk, and maintenance) to all departments at lower cost

## COMMUNITY OUTCOMES SUPPORTED:

- Enable County employees to be the best at serving their customers
- · Deliver information and services to citizens at work, at home, and in the community
- · Increase the productivity of government

PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY04 ACTUAL	FY05 APPROVED
Outcomes/Results:						
Average cost saving per PC purchased via DCM (\$)	266	321	316	308	280	300
Average age of PCs (years)	1.5	2.1	2.3	2.5	3.0	2.5
Service Quality:						
Average Help Desk wait time (seconds)	5.5	7.5	6.3	ь90	2.3	<sup>ь</sup> 90
Percentage of Help Desk calls resolved during initial call	92	96	96	80	95	80
Average time to repair a PC (hours)	5.8	4.3	3.8	8.0	2.1	8.0
Efficiency:						
Cost per PC covered under services (\$) <sup>c</sup>	410	410	410	431	410	431
Cost per service call (including installations) (\$)	292	205	147	164	134	148
Workload/Outputs:						
PCs replaced	1,555	257	1,804	0	115	2,250
PCs covered under services	5,900	6,383	6,853	6,900	6,947	7,800
Service calls performed (including installations) <sup>a</sup>	8,128	13,389	20,329	20,000	22,868	22,000
Inputs:						
Expenditures - purchases (\$000)	2,526	939	2,174	523	531	2,860
Expenditures - training (\$000)	171	171	171	0	0	0
Expenditures - services (\$000)	2,377	2,751	2,988	3,278	3,066	3,259
Expenditures - management (\$000)	<u>666</u>	<u>520</u>	<u>717</u>	<u>649</u>	<u>634</u>	<u>674</u>
TOTAL expenditures (\$000) <sup>d</sup>	5,740	4,381	6,050	4,450	4,231	6,793
Workyears <sup>d</sup>	7.0	7.0	7.0	7.0	7.0	7.0

## Notes:

#### **EXPLANATION:**

The Desktop Computer Modernization (DCM) program was developed by Montgomery County's Department of Technology Services based on a best practices approach to maintaining a modern, cost-effective desktop computing environment in the County. The program, which began in FY99, is designed to lower the total cost of ownership through standardization, asset management, Help Desk support, and maintenance services. The DCM program includes centralized management and maintenance of the County's installed base of nearly 7,000 desktop and laptop computers and annual replacement for one-fourth of those PCs. The program is designed to improve the efficiency and effectiveness of County employees by ensuring that they have the appropriate, state-of-the-art computing resources they need to do their job. County DCM staff are responsible for planning, coordination, and quality assurance, and for coordinating and monitoring PC installation, moves, adds, changes, the Help Desk, and maintenance services provided by a contractor.

**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Office of Human Resources (training), user departments (planning, implementation).

**MAJOR RELATED PLANS AND GUIDELINES:** Horizon 21 Information Technology Strategic Plan: 1998, 1999; Telecommunications Audit Action Plan, 1998; DCM Program Best Practices and Financial Analysis, 1997.

<sup>&</sup>lt;sup>a</sup>The number of service calls performed has continued to increase over the years as more and more departments utilize the PC Help Desk.

<sup>&</sup>lt;sup>b</sup>90 seconds is the contractual level of service; the actual results have been well below the contractual requirement.

<sup>&</sup>lt;sup>c</sup>The cost per PC covered under services is a fixed, contracted amount per PC, with some variability depending on the type and quality of service.

<sup>&</sup>lt;sup>d</sup>From FY01 through FY04, DCM program expenditures and staff have consisted of two contractors and five in-house positions from the Enterprise Services Program. In FY05, one contractor will be converted to a County merit position. Thus, the expenditures and workyears for FY05 include one contractor and six in-house positions from the Enterprise Services Program.

# **TECHNOLOGY SERVICES**

## PROGRAM:

Geographic Information Systems

# PROGRAM ELEMENT:

Custom Maps and Data Reports Generation

#### PROGRAM MISSION:

To provide timely and accurate maps and data reports that enable informed decision-making on geographically-based issues by customer departments

## **COMMUNITY OUTCOMES SUPPORTED:**

- Enable County employees to be the best at serving their customers
- · Deliver information and services to citizens at work, at home, and in the community
- Increase the productivity of government

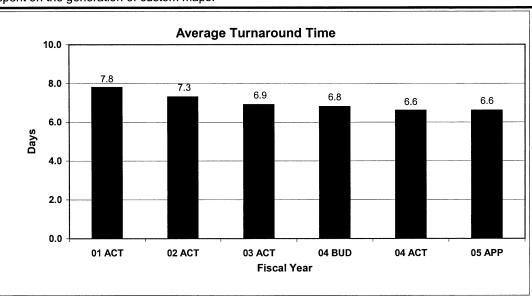
PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY04 ACTUAL	FY05 APPROVED
Outcomes/Results:						
Cost avoidance for land surveys - Department of Public	215	235	250	250	248	250
Works and Transportation (\$000)						
Cost savings on election maps - Board of Elections (\$000)	35	35	35	35	34	35
Cost savings on State's Attorney maps (\$000)	15	15	15	15	14	15
Service Quality:						
Average turnaround time for production of customized	7.8	7.3	6.9	6.8	6.6	6.6
maps (days)						
Efficiency:						
Average cost per map (\$)	123	90	85	103	106	106
Workload/Outputs:						
Number of custom maps provided	1,360	1,450	1,604	1,450	1,405	1,500
Number of database layers updated	8	8	8	9	9	9
Inputs:	-					
Workyears <sup>a</sup>	2.5	2.4	2.3	2.3	2.3	2.3
Expenditures - personnel (\$000)	167	131	137	149	149	159
INI - 4						

## Notes:

<sup>a</sup>Workyears relate to staff time spent on the generation of custom maps.

## **EXPLANATION:**

The County government has made increasing use of customized Geographic Information System (GIS) maps. While the average cost per map has remained relatively steady, the turnaround time has improved.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission, Montgomery County Public Schools, Department of Public Works and Transportation, Department of Permitting Services, user departments and agencies, cities of Gaithersburg and Rockville, Metropolitan Washington Council of Governments.

**MAJOR RELATED PLANS AND GUIDELINES:** Horizon 21 Information Technology Strategic Plan, July 1998, 1999; Montgomery County GIS Plan, June 1996.

## **TECHNOLOGY SERVICES**

#### PROGRAM:

PROGRAM ELEMENT:

Radio Communications

Radio Maintenance

#### PROGRAM MISSION:

To provide timely and reliable communications (radio) maintenance to the Police Department, Fire and Rescue Service, Department of Public Works and Transportation, other departments and agencies as designated, and to the County Executive and County Council

#### COMMUNITY OUTCOMES SUPPORTED:

- Enable County employees to be the best at serving their customers
- Deliver information and services to citizens at work, at home, and in the community
- · Increase the productivity of government

PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY04 ACTUAL	FY05 APPROVED
Outcomes/Results:						
Percentage of services rendered without	NA	99.6	99.9	95.0	96.0	95.0
requiring a revisit						
Percentage availability of radio systems	NA	99.9	100.0	100.0	100.0	100.0
infrastructure						
Service Quality:						
Percentage of customers satisfied with	NA	99.7	99.7	99.9	99.7	99.9
Communications Maintenance Services						
Average repair wait time for in-shop while- you-wait service (minutes)	NA	50	47	55	50	45
Average turn-around time for in-shop bench service (minutes)	NA	62	41	45	40	30
Average turn-around time for depot repair	NA	14.1	<sup>a</sup> 27.2	14.0	14.0	14.0
service (days)						
Efficiency:						
Service requests fullfilled per workyear	410	374	248	523	202	146
Workload/Outputs:						
Number of mobile radios installed in County	NA	1,650	1,650	1,650	1,650	1,900
vehicles						
Number of service requests fulfilled	3,565	3,426	<sup>b</sup> 2,277	4,800	1,660	1,340
Number of portable radios in active service	NA	1,856	2,061	1,856	1,952	2,610
Inputs:						
Expenditures - workyears (\$000)	545	592	702	746	623	765
Expenditures - operations and capital outlay (\$000)	<u>905</u>	<u>950</u>	<u>668</u>	<sup>c</sup> 1,533	<u>1,416</u>	
Total expenditures (\$000)	1,450	1,542	<sup>b</sup> 1,370	2,279	2,039	2,838
Workyears <sup>c</sup>	8.7	9.2	9.2	9.2	<sup>d</sup> 8.2	9.2

## Notes:

## **EXPLANATION:**

The Public Safety 2000 program had a major impact on program performance between FY01 and FY03. In FY01, work efforts were increasingly focused on keeping existing radio equipment from dying of advanced age and from decreased support and replacement spending by user departments. Some radios were abandoned without replacement. In FY03, warranty considerations, equipment changeover, and training issues had major impacts on program performance.

PROGRAM PARTNERS IN SUPPORT OF OUTCOMES: User departments (planning, implementation).

**MAJOR RELATED PLANS AND GUIDELINES:** Telecommunications Audit Action Plan, 1998; Communications Maintenance Section Policies and Procedures.

<sup>&</sup>lt;sup>a</sup>The FY03 actual turn-around time for depot repair service was longer than projected because of contractor transition (the existing contract expired, but the new contract was not yet in place). During the transition, in-house staff and various vendors were used for repair service on an ad-hoc basis.

<sup>&</sup>lt;sup>b</sup>The FY03 actual was down due to the transition between the old and new radio systems - it was not cost effective to repair an old radio system which was soon to become surplus equipment.

<sup>&</sup>lt;sup>c</sup>Beginning with the FY04 budget, radio maintenance costs for the Public Safety Communications System are included.

<sup>&</sup>lt;sup>d</sup>The decrease in the FY04 actual workyears was due to the program's inability to fill two vacancies because of the position freeze in FY04.

# **TECHNOLOGY SERVICES**

PROGRAM:

PROGRAM ELEMENT:

Telecommunications Services

Desktop Telephone Services

#### **PROGRAM MISSION:**

To provide timely telephone and voice mail moves, adds, changes, and repairs with minimum interruption in service

## **COMMUNITY OUTCOMES SUPPORTED:**

- Enable County employees to be the best at serving their customers
- · Deliver information and services to citizens at work, at home, and in the community
- · Increase the productivity of government

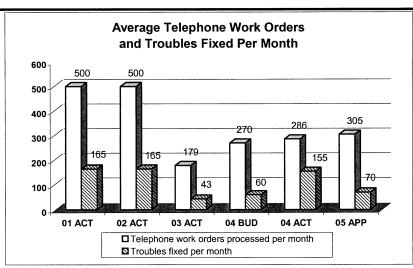
PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY04 ACTUAL	FY05 APPROVED
Outcomes/Results:						
Service Quality:						
Average percentage of troubles <sup>a</sup> outstanding per month	NA	1	1	1	1	1
Average days to complete a move/add/change request	NA	3	3	3	3	3
Average time to fix a trouble (hours)	NA	8	8	8	8	8
Efficiency:						
Telephone lines maintained per workyear	1,711	1,657	1,948	2,024	2,146	2,301
Voice mailboxes maintained per workyear	1,130	1,054	1,099	1,304	2,106	1,581
Troubles and work orders processed per workyear	998	998	333	555	745	630
Workload/Outputs:						
Telephone lines maintained	13,686	13,255	15,582	14,450	15,234	16,430
Voice mailboxes maintained	9,042	8,433	8,791	9,310	14,953	11,290
Average telephone work orders processed per month	500	500	179	270	286	305
Average troubles fixed per month	165	165	43	. 60	155	70
Inputs:						
Workyears	8.0	8.0	8.0	7.1	7.1	7.1
Expenditures (\$000) <sup>b</sup>	918	4,831	4,635	776	724	1,037

# Notes:

<sup>b</sup>The FY02 actual and FY03 actual expenditures include a Council Supplemental of \$3,934,115 for an Automatic Call Distributor for the E911 primary and secondary County communication centers. This "turnkey" system included planning, assessment, installation, design, implementation, reporting, testing, acceptance, and maintenance. The FY04 budget figure does not include the FY02 supplemental appropriation. The FY05 budget includes a one-time expenditure of \$284,550 to migrate the Executone telephone key systems to the County's PBX platform.

## **EXPLANATION:**

The graph shows the average number of telephone work orders processed and troubles repaired per month. Telephone work orders include moving, adding, or changing telephones or telephone numbers, as well as program changes in PBX software and voice mail systems. Troubles can include problems with the telephone system, jacks, building wiring, or telephone sets. The number of telephone work orders has increased due to the implementation of a new PBX on June 30, 1999, and as a result of more thorough documentation of work (for instance, every request for a change in any telephone service is now documented). Triaging of reported problems by Help Desk and customer service staff has contributed to a decline in the number of reported troubles needing repairs.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Department of Technology Services IT Help Desk and Network Management; Procurement (contract management support); user departments.

**MAJOR RELATED PLANS AND GUIDELINES:** Horizon 21 Information Technology Strategic Plan, 1999; Telecommunications Audit Action Plan, 1998.

<sup>&</sup>lt;sup>a</sup>See the "Explanation" below for a definition of what constitutes a "trouble."